120Ra-1 Pentium III Processor Installation Insert

PN: 455-01614-000

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Introduction

This *Intel® Pentium®III Installation Insert* provides information for installing the Pentium III processor upgrade into your 120Ra-1 system. Read this procedure in its entirety before performing the installation to become familiar with the items in this upgrade and the sequence of steps you will perform.

Unpacking the Upgrade

When you receive your Pentium III processor upgrade, inspect the shipping container prior to unpacking. If the shipping box is damaged, note the damage, and if possible, photograph it for reference. After removing the contents of the container, keep the carton and the packing materials. If the contents appear damaged when you unpack the box, file a damage claim with the carrier immediately.

Installing the Upgrade

⚠ CAUTION

Observe static precautions. Use an antistatic wrist strap. Hold the processor only by its edges. Do not touch the pins of the processor board.

⚠ CAUTION

Installing a second processor that is of a different type than the first processor will result in system damage. Do not touch or bend the processor's exposed pins.

Note: When adding a second processor to your system, you must remove the terminator from the secondary processor socket.

Removing the Front Bezel

Refer to the Figure 1 and remove the front bezel of the server as follows:

1. Terminate all applications.
2. Open the front door of the system rack.
3. If the front server bezel is locked, unlock it.
4. Grasp the right edge of the front bezel and pull the bezel towards you to open it.
5. Slide the front bezel left to disengage the mounting tabs and remove the front bezel from the chassis.
6. Press the power ON/OFF button (Figure 1, A) to power down the server.
7. Remove the two screws securing the server to the front of the system rack.

⚠ WARNING

To reduce the risk of personal injury, be careful when pressing the component rail release latches and sliding the component in or out of the rack. The slide rails could pinch your fingertips.

8. Pull the server out of the rack until the component rail release latches engage. The component rail release latches on either side of the server lock the server onto the slide rails.

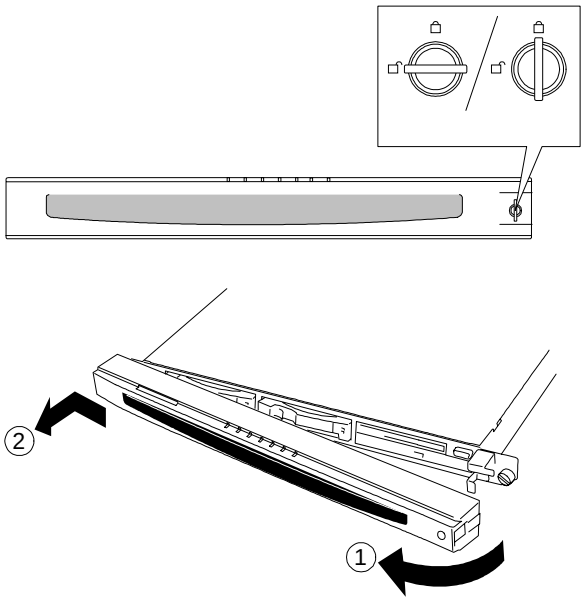

Figure 1. Opening the Front Bezel

Top Covers

The server includes front and rear top covers. To install a processor into the system board of the server, you must remove the rear top cover.

⚠ CAUTION

For proper cooling and airflow, do not operate the system with the top covers removed. Always replace the covers before powering on the system.

⚠ WARNING

If you are removing the top covers after the system is set up, you must first power off the system and all external devices and then **Unplug** the system power cord

Removing the Rear Top Cover

To remove the rear top cover:

1. Loosen the captive thumbscrew securing the top cover to the rear panel. See Figure 2. Slide the top cover towards the rear of the server chassis until its tab fasteners unlock.
2. Lift the top cover up and away from the chassis.

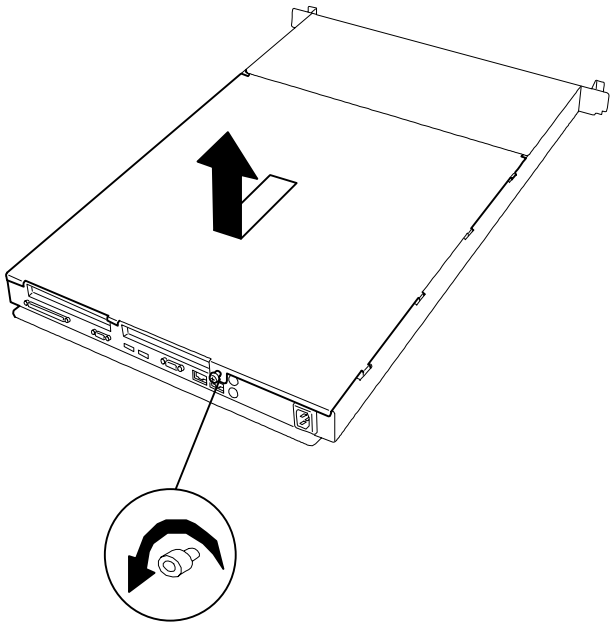

Figure 2. Removing the Top Cover

Installing a Processor

⚠ CAUTION

Observe static precautions. Use an antistatic wrist strap. Hold the processor only by its edges.

⚠ CAUTION

Installing a second processor that is of a different type than the first processor will result in system damage. Do not touch or bend the processor's exposed pins.

Note: When adding a second processor to your system, you must remove the terminator from the secondary processor socket.

1. Raise the ZIF socket lever to the up position. See Figure 3.

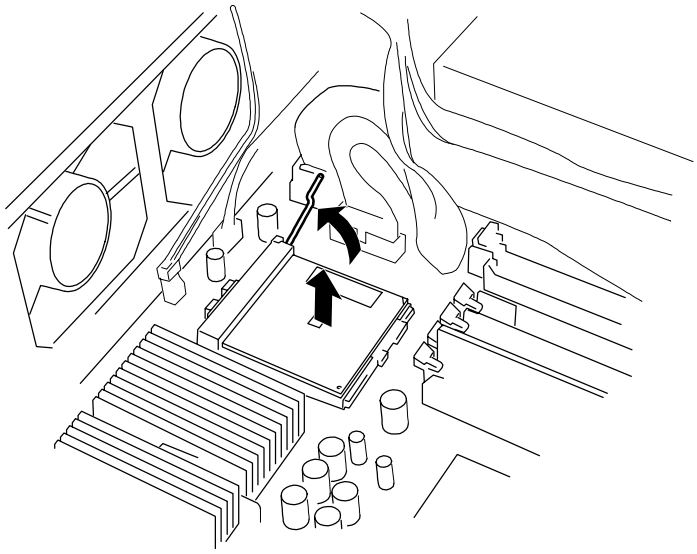

Figure 3. Raising the ZIF Socket Lever

2. Remove the terminator from the secondary processor socket.
3. Position the processor over its ZIF socket so the processor pins align with the socket holes. Note that one corner of the processor has three pins that should be positioned over the corner of the socket that has the three matching pin holes. See Figure 4, A.

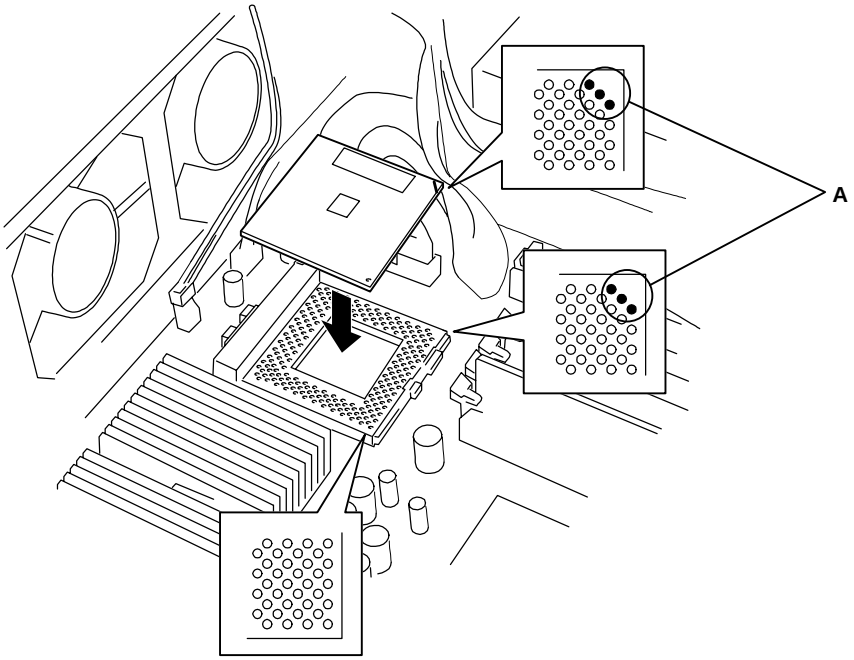

Figure 4. Positioning the Processor

4. Insert the processor pins into the socket. Apply pressure equally over the top surface of the processor until it seats in the socket. The processor should easily fit, do not force the processor into the socket.

5. Lower the ZIF socket lever into the locked position. See Figure 5.

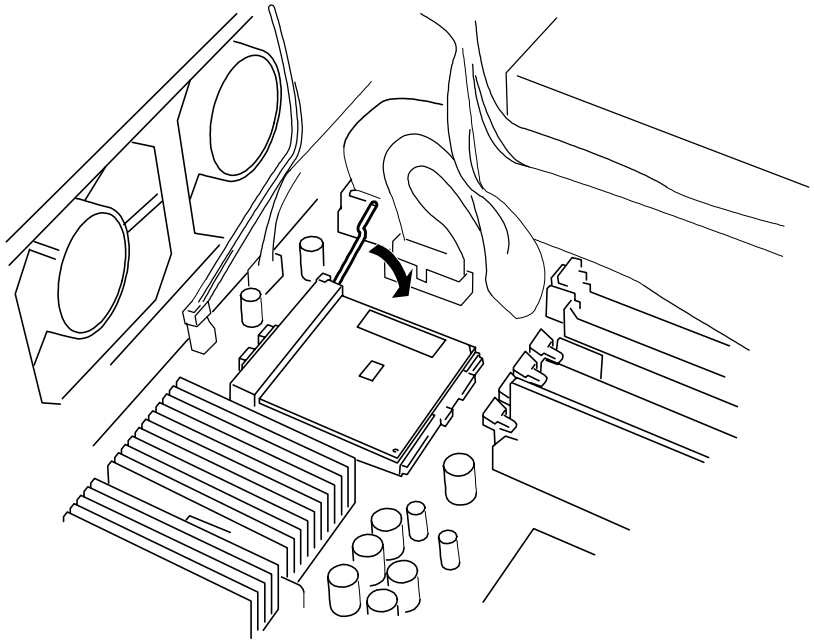

Figure 5. Installing the Processor

⚠ CAUTION

The thermal pad is very delicate and tears easily. Handle with extreme care. Perform the next two steps exactly as described to ensure proper heat transfer from the processor to the heat sink.

6. One side of the thermal pad is shiny metallic foil. The other side of the thermal pad is covered with a clear plastic liner. Carefully peel the liner away from the pad. The clear liner is not used and may be discarded.
7. Position the thermal pad on top of the processor with the shiny side facing down and the yellow sticky side of the pad facing up. Ensure the pad is positioned over the center of the processor as shown in Figure 6.

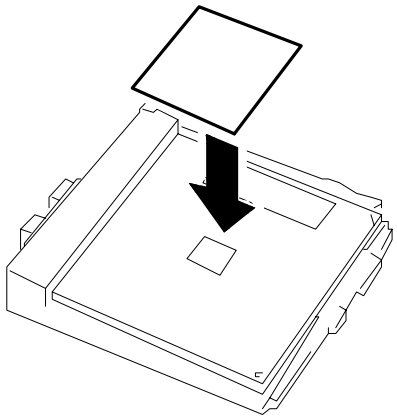

Figure 6. Installing Thermal Pad

8. Ensure the small end of the heat sink clip is positioned into the heat sink as far as it will go.

Note: The heat sink included with this upgrade may not resemble the heat sink on the processor in your system. Several types of heat sinks are used with the Pentium III processor.

⚠ CAUTION

When performing the next three steps, be sure the heat sink is held firmly in position. If the heat sink should slide across the top of the processor, the thermal pad may be damaged.

9. Attach the small end of the heat sink clip to the tab located on the base of the ZIF socket. See Figure 7, A. Gently lower the heat sink onto the processor, being careful not to move the heat sink from side to side.

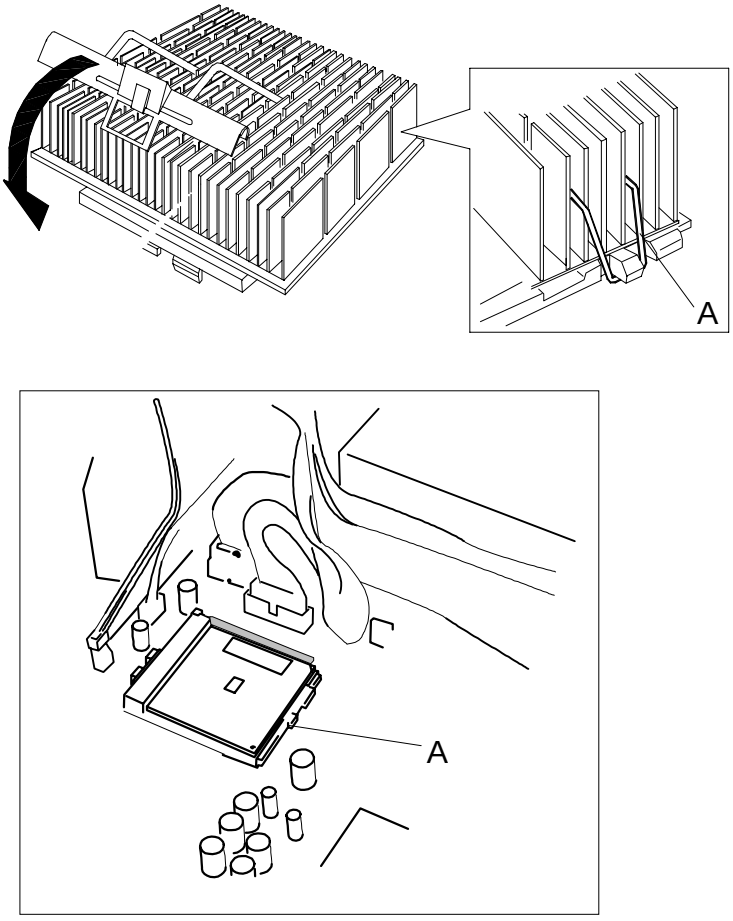

Figure 7. Positioning the Heat Sink Clip

10. Using a small flat blade screwdriver, press down on the heat sink clip retention latch and hook it under the fastener tab on the base of the ZIF socket, as shown in Figure 8, A. The heat sink clip is now secured to the fastener tab of the ZIF socket.

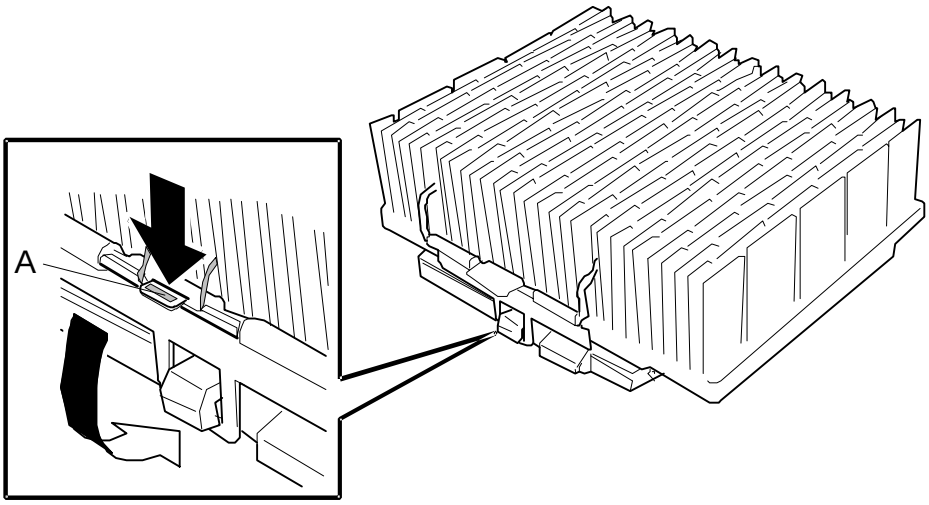

Figure 8. Installing Heat Sink Clip

11. Record the processor in the equipment log.

Replacing the Rear Top Cover

To replace the rear top cover:

1. Position the top cover above the server and slide the cover towards the front of the server chassis until its tab fasteners lock into the chassis.
   See Figure 9
2. Tighten the captive thumbscrew securing the top cover to the chassis.
3. Slide the server into the system rack and secure it to the rack.
4. Plug in the server power cord, and power on the server.

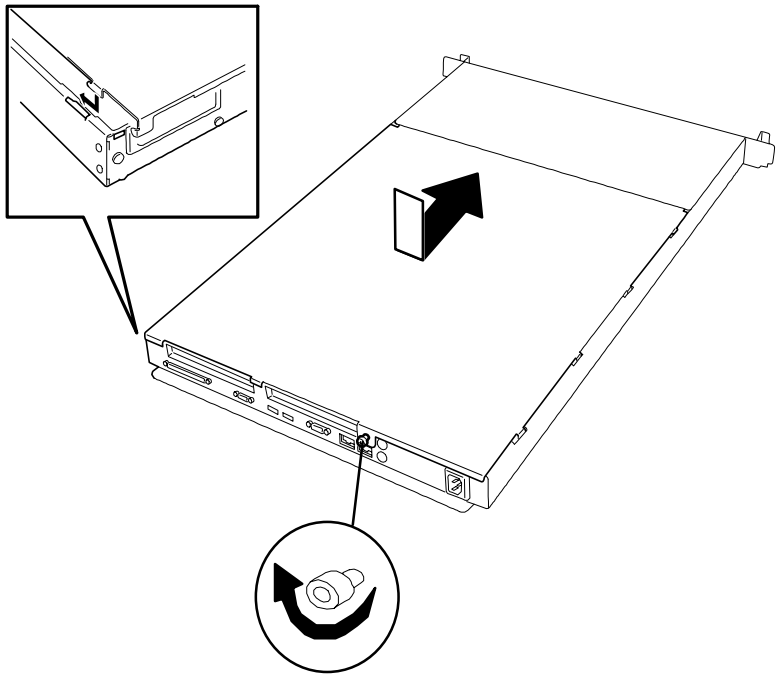

Figure 9. Replacing the Top Cover

Replacing the Front Bezel

1. Position the front bezel so the mounting tabs of the front bezel are aligned with their mounting holes on the front of the system. See Figure 10.
2. Slide the bezel right until the bezel snaps into place.

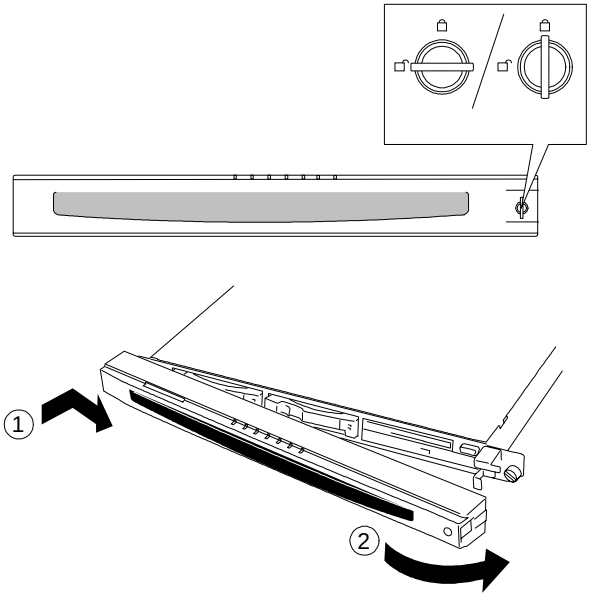

Figure 10. Replacing the Front Bezel